Work Order ID anuary-02-13 1:46:461				*950)97*							Page 1	
tem ID: D3195-0				Accept	*N900	040	100)*	Setup	Start Stop	1/1	S1*	- 4
tem Name: Bracket A Start Date: 1/02/13 Required Date: 1/11/13 Reference:	Start Q	ety: 4.00 Qty: 4.00	*4* *4*		Cust Item I Customer:	D:					^INI	S2*	
Approvals: Process	s Plan:	Ø	Date/3-01-4	Tooling:	Da	ate:			Run	Start	*N	R1*	
QC:			Date:	_ SPC (Y/N):	Da	ate:				Stop	*N	R2*	
Sequence ID/ Work Center ID	Operati Descrip		AND THE RESIDENCE OF THE PARTY	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp	
Draw Nbr	Revision Nbr												
D3195	Rev B		• = <i>,</i>										
*100 *100* Bandsaw Jeaspa Bandsaw	BAND SA	Memo	(0.75" x 2.00") x 3.60" lo	0.00 0.00			02 02 89	at		13.	<u>-0(-</u> 1	10 (x	7
· ¹¹⁰ * 11 0*	HAAS CN	NC VERTICAI	L MACHINING #1	0.00			ی	DAS /	ET.	13	5 OI	u /	\(\tau^{\tau}\)
HAAS 1 HAAS CNC vertical machine #	¥1	Memo Machine D3 1 Deburr	3195-1 as per Folio FA334	0.00 and Dwg D31951dentify	as D3195-		7.	89					
¹²⁰ *12∩*	QC2- Insp	pect parts off n	nachine FAI/FAIB	0.00			4 <u>4</u>	Dilo Oilo	3 4	13	01	11/2	4
OC		Memo		0.00			* ?	\89					

Memo

Quality Control

NCR:	Yes	1	No

DQA: ____ Date: ____

NCR: Y	es	/ No				WORK ORDER NON-	COI	NFORI	MANCE / UPDATE				" •
						<u></u>					QA Closed:	Date:	
Work Orde	r:					DISPOSITION			AGAINS	ST DE	PARTMENT	PROCESS	
Part N	-					Rework Scrap		ľ	Skid-tube Crosstub Machining Small Fa	ab	4	Water Jet d. Eng. Coor.	Engineering Quality
NCR N	lo.					Use-as-is Work Order Update]		noforming Finishir Large Fab Composi	~	Rec/Stor	e/Packaging Supplier	Other
Root					Descri	ption of work order update		nitial	Action		Sign &		
Cause		Date	Step	Qty	,	or Non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
oc/Data quip/Tooling	_												
perator	┨												
Naterial	ᅦ												
etup	\exists												
ther	\neg												
rocess													
upplier													
raining		•										-	
Inapproved													
						F	AUL	T CATE	GORY				
Landir	ng G	iear				General		•			_		_
		Bending				Bend		Grain			Ovalized	94 1	Pressure/Forced
	\Box	Centre No	ot Concer	itric to	o/s	BOM/Route	_	Hardwa	re	L	Over/Under	tolerance	Temperature/Cure
ļ	Ц	Cracks				Broken/Damaged		Inspecti	on Incomplete	<u> </u>	Part Incorre		Weld
	\neg	Crushed/0	Crimped.			Burrs		-1	ions Incomplete/Unclear	L	Part Lost/Mi	· · · · · ·	Wrong Stock Pulled
	\Box	Cuffs				Contamination		Mainte		L	Part Moved		1
ļ		Heat Trea	it		<u> </u>	Countersink	\perp	Mislabe	eled		Positioned V		_
ļ		Inspection	•	Tube	ļ	Cut Too Short		Misread	t		Power Loss/	Surge	Other
	-	Ripples in				Drill Holes		Offset					
		Torque W		xtrusio	n	Drawing	_		Calibration				
- 1	$\overline{}$	Turning S				Finish		Out of S	Sequence		±1.50		
	- 1	Wave/Tw	ist in Tub	e	İ	Folio		Outside	Dimensions				

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Ordo January-02-13				*950)97*						Page 2	
Item ID: Revision ID: Item Name:	D3195-041 Bracket Asser			Accept	*N900	040	100)* s	etup Star Stop	1 ህ	S1* S2*	***
Start Date: Required Date: Reference:	1/02/13 1/11/13	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item II Customer:	D:	_		Stor			
Approvals:	Process Pl	an:	Date:	Tooling:	Da	ıte:		R	un Stai	1/7	R1*	
	QC:		Date:	SPC (Y/N):	Da	ite:			Sto	*N	R2*	
Sequence ID/ Work Center I	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	_
*130 *130* QC Quality Control		QC8- Inspect parts - sec Memo	ond check	0.00	ml 13/011	///		4	13			
140		Chemical Conversion C	oat per QSI005 4.1	0.00					מא אה	9 3		
140 HandFinish Hand Finishing		Memo		0.00				_4_	76	3 13 1		

150

150 Powdercoat

Powder Coating

0.00

0.00

A & BL 13-1-15.

										DQA:	Date	· •
NCR:	Yes / No				WORK ORDER NON-O	100	NFORM	MANCE / UPD	DATE	QA Closed:	Date	:
Work Orde	er.				DISPOSITION		,		AGAINST DE	PARTMENT,	/PROCESS	
Part N	No				Rework Scrap Use-as-is Work Order Update		1 Thern	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update		Initial	Acti	on	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Ch	nief Eng	Descri	iption	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling	H											
Operator												
Material		į										
Setup	H											
Other	H											
Process	\vdash											
Supplier	Н										,	
Training Unapproved	H			İ								
Oliapproved			<u> </u>	1	<u> </u>	AUI	T CATE	GORY		i	l	
Landi	ng Gear				General		0,			4		
	Bendir	ng			Bend	Г	Grain			Ovalized	Γ	Pressure/Forced
		Not Conce	ntric to	o/s	BOM/Route		 Hardwa	ire		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged		Inspect	ion Incomplete		Part Incorre	 	Weld
		ed/Crimped	l <u>.</u>		Burrs	\vdash	1	ions Incomplete/U	Inclear	Part Lost/M	issing	Wrong Stock Pulled
	Cuffs	•			Contamination		Mainte	,		Part Moved	- L	
	Heat T	reat			Countersink		Mislabe	eled		Positioned V	Vrong	

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde				*950			Page 3		
Item ID: Revision ID: Item Name:	D3195-041 Bracket Asse	embly		Accept	*N900	04010 0)* Setup	Start Stop	*NS1* *NS2*
Start Date: Required Date: Reference:	1/02/13	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item I Customer:	D:			
Approvals:		lan:	Date:			ate:	Run	Start Stop	*NR1* *NR2*
Sequence ID/ Work Center II 160 *160* QC Quality Control	D	Operation Description QC3- Inspect Part Finish Memo		Set Up/ Run Hours 0.00	Tool ID	Tool # Plan Code	Accept Re Qty Qt	•	Reject Insp. Number Stamp
170 *170* Small Fab Small Fab		Small Fab Memo 1-Lightly Sai D3195A/RC	nd bonding surface2-Bor ontact Cement /23	0.00 0.00 nd D3195-5 into D3195-1	as per Dwg		4	<u> </u>	
180		QC5- Inspect part comple	eteness to step on W/O	0.00 15	S				

180

Quality Control

Memo

											DQA:	Date:	*
NCR:	Yes	/ No				WORK ORDER NON-O	100	NFORM	MANCE / UP	DATE			, •
											QA Closed:	Date:	
Work Ord	er.					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Work Ord	CI.					Rework	1		Skid-tube	Crosstube]	Water Jet	Engineering
Part	No.					Scrap	1	ļ	Machining	Small Fab	Pro	d. Eng. Coor.	Quality
						Use-as-is		Thern	noforming	Finishing	Rec/Sto	re/Packaging	Other
NCR	No.					Work Order Update			Large Fab	Composite]	Supplier	
							ш				<u></u>		T
Root						ption of work order update	4	nitial		tion	Sign &	_	
Cause		Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data	\Box								:				
Equip/Tooling	L												
Operator													
Material								•					
Setup						-							
Other													
Process													
Supplier													
Training													
Unapproved													
						F	ΑUL	T CATE	GORY				
Landi	ng (Sear				General		_			_		_
		Bending				Bend		Grain			Ovalized		Pressure/Forced
		Centre No	ot Concer	ntric to	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
		Cracks				Broken/Damaged		Inspecti	on Incomplete		Part Incorre	ct	Weld
		Crushed/	Crimped.			Burrs		Instruct	ions Incomplete/	'Unclear	Part Lost/M	issing	Wrong Stock Pulled
!		Cuffs				Contamination		Mainte	enance		Part Moved		_
ĺ		Heat Trea	it			Countersink		Mislabe	eled		Positioned V	Vrong	
		Inspection	n Strip in	Tube		Cut Too Short		Misread	ł		Power Loss/	Surge	Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde		097		*950)97*						Page 4
Item ID: Revision ID: Item Name:	D3195-041 Bracket Assen	nbly		Accept	*N900	<u>)</u> 040	100	* S	etup Star Stoj	177.	\$1* \$2*
Start Date: Required Date: Reference:	1/02/13	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item Customer:						
Approvals:		nn:				Date:		R	un Stai Sto _l	"! \ \F	२1* २2*
Sequence ID/ Work Center II	D	Operation Description Identify as per dwg & St	ock Location:	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
100 Packaging Packaging		Memo		0.00		*		41	- 4) ?	SP 3-01-11
200		QC21- Final Inspection	- Work Order Release	0.00					10	1,1,0	1
200		Memo		0.00					-15	> 	[//

Memo

Quality Control

pl 13-01-14

											DQA:	Date:	fa c, 19
NCR: Y	⁄es	/ No				WORK ORDER NON-O	COL	NFORI	MANCE / UP	DATE	·		
											QA Closed:	Date:	
Work Orde	or.					DISPOSITION				AGAINST DE	PARTMENT,	/PROCESS	
Work Orac	-1.					Rework	1		Skid-tube	Crosstube		Water Jet	Engineering
Part N	No.					Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor.	Quality
	•		•			Use-as-is		Thern	noforming	Finishing	Rec/Stor	re/Packaging	Other
NCR N	۱o.					Work Order Update]		Large Fab	Composite		Supplier	
	_			 	,		•	L.,			·	· ·	
Root					L	ption of work order update		nitial	i .	tion	Sign &		
Cause		Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data	Ш	1											
Equip/Tooling										•			
Operator			Ì										
Material													
Setup													
Other .						<i>*</i>	İ						
Process						•	.		1				
Supplier					, .								
Training						4							
Unapproved.													
						F.	AUL	T CATE	GORY		. <u> </u>		
Landir	ng G	Gear				General	_ •						•
		Bending		;		Bend		Grain			Ovalized		Pressure/Forced
		Centre No	ot Concer	ntric to	o/s	BOM/Route		Hardwa	ire		Over/Under	tolerance	Temperature/Cure
1		Cracks				Broken/Damaged		Inspect	ion Incomplete		Part Incorre	ct	Weld

Instructions Incomplete/Unclear

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled -

Misread

Offset

Wrong Stock Pulled

Other

Part Lost/Missing

Positioned Wrong

Power Loss/Surge

Part Moved

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Crushed/Crimped

Inspection Strip in Tube

Torque Waves in Extrusion

Cuffs

Heat Treat

Burrs

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Picklist Print

January-02-13 1:46:46 PM

Work Order ID:

95097

Parent Item:

D3195-041

Parent Item Name:

Bracket Assembly

Start Date: 1/02/13

Required Date: 1/11/13

Page 1

Start Qty: 4.00

Required Qty: 4.00

Comments:

IPP Rev: A New Issue 05-11-08 II M

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3195-5 Pad		Manufactured	No			100	Each	14.0000	1	4	FF	7 /3	-01-1
				Location GA 8370	<u>04</u>	<u>Loc Qty</u> 14 14	<u>Lo</u>	c Code		4			
M6061T6B0.750X02.000 6061-T6 Bar .750 x 2.00		Purchased	No		•	170	f	21.9400	0.3	1.263158	_	01-1	<u></u>
				Location		Loc Oty	<u>Lo</u>	c Code					
		,		MAT049 122 123	753 & (21.94 5.8 16.14			1.2	163158			

NCR:	⁄es	/ No				WORK ORDER NON-	COI	VFOR	MANCE / UPI	DATE			
											QA Closed:	Date:	
Work Orde	er: _					DISPOSITION	7			AGAINST DI	PARTMENT,		
Part N	•					Rework Scrap Use-as-is Work Order Update		1 Thern	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
D = =4				I	Danasi	-ti	Τ .	Initial	Λ	tion	Cian 0		I
Root Cause		Date	Step	Qty		ption of work order update or Non-conformance	1	initial ief Eng		ription	Sign & Date	Verification	QC Inspector
Doc/Data		Date	step	Qty	<u> </u>	Ji Non-comormance		ilei Liig	Desci	iption	Date	Vernication	QC ITSPECTOR
Equip/Tooling Operator										·		÷	
Material	\vdash						-						
Setup													
Other	\dashv												,
Process	\Box									•			
Supplier	\vdash						1						
Training													
Unapproved		•											
			•			F	AUI	T CATE	GORY		· · · · · · · · · · · · · · · · · · ·		
Landi	ng G	ear				General							
		Bending				Bend		Grain			Ovalized		Pressure/Forced
		Centre No	ot Conce	ntric to	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
		Cracks				Broken/Damaged		Inspecti	ion Incomplete		Part Incorre	ct	Weld
		Crushed/	Crimped.			Burrs		Instruct	ions Incomplete/	Unclear	Part Lost/M	issing	Wrong Stock Pulled
	Ш	Cuffs				Contamination		Mainte	enance		Part Moved		
		Heat Trea	it			Countersink		Mislabe	eled "		Positioned \	Vrong	-
		Inspectio	n Strip in	Tube		Cut Too Short		Misread	t		Power Loss/	Surge	Other
	Ш	Ripples in	Bend			Drill Holes		Offset					
		Torque W	aves in E	xtrusio	n	Drawing		Out of	Calibration				

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

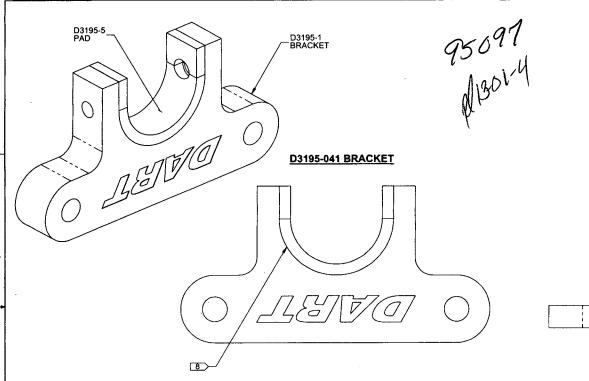
DART AEROSPACE LTD	Work Order:	95097
Description: Bracket	Part Number:	D3195-1
Inspection Dwg: D3195 Rev: B		Page 1 of 1

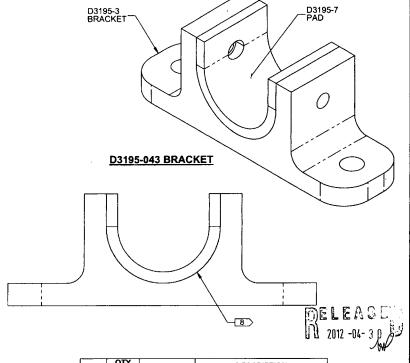
FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.265	+/-0.010	1.260	/		-محس	RT -4.
0.242	+/-0.010	-246	/		γ	
1.084	+/-0.010	1.086	/		hight sunge	71006
R0.200	+/-0.010	. 200			uen	
R0.377	+/-0.010	.375	_		((
Ø0.277	+0.005/-0.001	. 278			V	
2.677	+/-0.005	2.677			`(
3.432	+/-0.010	3.433			٠.	
0.754	+/-0.010	.754			`(
1.387	+/-0.010	1.363	/		`.	
0.500	+/-0.010	,501				
0.250	+/-0.005	,2495			٠,	
1.754	+/-0.010	1.756	/		, (
Ø0.191	+0.005/-0.001	,193			- \	

Measured by: 02	Audited by:	and	Preliminary Approval:
Date: 13-01 = 11	Date:	13/0//11	Date:

Rev	Date	Change		Revised	by	Approved
Α	04.04.20	New Issue	(P/O D412-702-011/-013)	KJ/RF 1	^	1
В	12.05.14	Dwg Rev updated		KJ ♥	X	
				· ·		7-7





ITEM	QTY -043	P/N	DESCRIPTION
	_ X	D3195-043	BRACKET
1	1	D3195-3	BRACKET
2	1	D3195-7	PAD

, В	- UPDATED DRAWING FORMAT - ADDED NOTE 8, SHEET 1, B - D3195-5 & D3195-7 DIMENSIONS EXTENSIVELY REVISED RP 12.04.13 (B5-3, C3-3) - REF: PARTI-130					
Α	NEW ISS	SUE		CP	03.06.23	
REV.		-	DESCRIPTION	BY	DATE	
DESIGN	v v	RP	DART AEROSPACE LTD			
DRAWN	WN RP		HAWKESBURY, ONTARIO, CANADA			
CHECK	ILCONILD PS .F.		DRAWING NO.		REV. B	
MFG. A			D3195	SHEET 1 OF 3		
APPRO	PPROVED IN		TITLE		SCALE	
DE APP	APPR BRACKET		BRACKET		NTS	
DATE 12.04.13			COPYRIGHT © 2003 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL WAS SUPPLED ON THE COPYRIST CONCIDENT THAT IT IS NOT TO BE USED FOR MAY PURPOSE OR COMPANION THE TO TO MAY OTHER PERSON WITHOUT WINSTED PERSONSION FROM DART AEROSPACE LTD			

ITEM	QTY -041	P/N	DESCRIPTION
	Х	D3195-041	BRACKET
1	1	D3195-1	BRACKET
2	1	D3195-5	PAD

NOTES:
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3195-04X" AND BATCH NUMBER "BXXXXX" PER QSI044 METHOD 6.1
7) WEIGHT: D3195-041: 0.15 lbs
D3195-043: 0.14 lbs
8) BOND PAD TO BRACKET USING 3M SCOTCH-WELD HIGH PERFORMANCE 1300/1300L (OR EQUIVALENT)

С

